

Institution: Newcastle University
Unit of Assessment: 17a Archaeology
Title of case study: Historic Landscape Characterisation: Research, Management and Planning
<p>1. Summary of the impact</p> <p>Research at Newcastle on the historic landscapes of Britain and Europe has included significant contributions to the development of a technique called Historic Landscape Characterisation (HLC). Work on the methodology and research applications of HLC has impacted on policy and practice in the fields of sustainable landscape management, planning, and heritage conservation in the UK and abroad.</p> <p>2. Underpinning research</p> <p>Researchers at Newcastle have been involved in pioneering and developing a technique known as Historic Landscape Characterisation (HLC) in the UK and Europe. Throughout history, people have shaped the character of the landscape that we see today. HLC interprets and maps those changes through GIS-based synthesis of landscape archaeology sources including maps, aerial photographs, archaeological survey, historic environment databases and historical documents. The resulting interpretations can then be used to help manage change in the historic environment. As the research output of archaeologists in the UoA's Landscapes strand has consistently demonstrated, HLCs are both landscape planning and management tools, and resources that can be used to frame and stimulate further research on the historic landscape. Key researchers working with HLC in Archaeology's Landscapes research strand include Sam Turner (Lecturer/Senior Lecturer 2004-13; Professor 2013-), Jim Crow (Senior Lecturer, 1990-2007), Graham Fairclough (Visiting Fellow, 2006-13; Strategic Research Adviser, 2013-), Alex Turner (Research Associate, 2009-), Oscar Aldred (Research Assistant, 2012-) and Sabrina Pietrobono (Marie Curie Intra-European Fellow, 2012-14).</p> <p>English Heritage's review of the use of HLC in the local government, environment and heritage sectors (<i>Using Historic Landscape Characterisation</i> 2004) singled out Turner's (2004) PhD research as the first example of the use of HLC to answer detailed research questions concerning the landscape history of a specific region. Subsequent research, including <i>Making a Christian Landscape</i> (2006), used HLC data to analyse how the early medieval landscapes of south-west Britain were created. From 2001-2007 Turner undertook the Devon HLC project at Devon County Council (2001-4) and subsequently at Newcastle University (2004-7), with funding from English Heritage. In 2007 the results were published as <i>Ancient Country: the Historic Character of Rural Devon</i>, alongside an interactive website. The book demonstrated that the physical features comprising the cultural landscape were created by historic processes in the medieval and early modern eras. In a series of publications, Newcastle researchers have led the way in showing that as well as being practical tools for landscape management, HLCs also have valuable research applications (1, 2).</p> <p>Through close collaboration with English Heritage, Newcastle researchers have developed Historic Seascape Characterisation (HSC) projects mapping coastal and intertidal areas in UK waters. Researchers at Newcastle were the first archaeologists to extend the research applications of HLC beyond the United Kingdom, establishing collaborative projects in Ireland, France, Spain, Greece (3) and Turkey (4). Examples include the <i>Making Christian Landscapes</i> project, which integrated HLC with data produced by industrial and academic partners to create new analyses of the early medieval Irish landscape (collaboration with University College Cork, funded by the Heritage Council). An AHRC-funded research project using HLC for the first time in both Greece and Turkey has led to several subsequent collaborations. Most recently, Turner and Pietrobono have secured funding from EC-FP7 for a project centred on Norman Italy, the first time HLC has been applied in that country (5).</p>

3. References to the research

References (all peer-reviewed)

1. Turner, S., 2006. 'Historic Landscape Characterisation: a landscape archaeology for research, management and planning', *Landscape Research*, 31(4), 385-398. DOI: 10.1080/01426390601004376
2. Turner, S. and G. Fairclough, 2007. 'Common culture: the archaeology of landscape character in Europe' in D. Hicks, G. Fairclough and L. McAtackney (eds), *Envisioning Landscapes: Situations and Standpoints in Archaeology and Heritage*, Walnut Creek, California: Left Coast Press, 120-145. (Available from HEI on request).
3. Crow, J., S. Turner and A. Vionis, 2011. 'Characterizing the historic landscapes of Naxos', *Journal of Mediterranean Archaeology* 24(1), 111-137. REF2 Output: 156610. DOI: 10.1558/jmea.v24i1.111
4. Turner, S. and J. Crow, 2010. 'Unlocking historic landscapes in the eastern Mediterranean: two pilot studies using historic landscape characterisation', *Antiquity* 84 (323), 216-229. <http://antiquity.ac.uk/ant/084/ant0840216.htm>
5. Pietrobono, S. and S. Turner, 2010. 'Comparing methods in European context: historic landscape characterisation and new perspectives for research in Italy', *Archeologia Postmedievale* 14, 111-133. (Available from HEI on request).

Major grants/contracts

Principal Investigator	Grant Title	Sponsor	Period of Grant	Total Grant
Sam Turner	Landscape & local character: Devon	English Heritage	2005-6	£ 12,612
Jim Crow	Unlocking historic landscapes in the Eastern Mediterranean	AHRC	2006-7	£ 73,239
Sam Turner	Irish Sea (English Sector) HSC	English Heritage	2010-11	£ 81,263
Sam Turner	Tyne and Wear HLC	English Heritage	2012-14	£ 133,529
Sam Turner	N-LINK Marie Curie IEF	EC FP7-People	2012-14	€ 200,371

4. Details of the impact

Developing policies and tools for environmental planning and management

The research has contributed to impacts upon the practices and policies employed by a wide variety of organisations responsible for sustainable development and the environment.

First, Newcastle researchers have played a leading role in developing the methodologies for new resources (HLCs and HSCs) which have informed and enhanced professional practice in a variety of ways. The HLC project for Devon had a formative influence in shaping current professional practice, in terms of contribution to the still-evolving methodology for HLC and consequently as contributing authors of the English Heritage *Template Project Design* for HLC projects, which is still used as standard guidance for projects in England (**IMP1**). Research for the Devon HLC moved the methodology forward significantly in terms of a stratigraphic approach to HLC analysis (as cited, for example, by reports on HLCs in Wiltshire (**IMP4**), the Isle of Wight and Shropshire (**IMP5**)). Newcastle's consultancy work has also demonstrated the value of HLC as a tool for predicting the sensitivity of archaeological landscapes (e.g. the North Devon NMP project, 2007), and this has contributed directly to the delivery of sensitive landscape management through agri-environment schemes. Turner has advised other English counties' HLC projects as members of their Steering Groups (e.g. Northumberland, Durham and Darlington HLCs). Researchers at Newcastle are now leading the Tyne and Wear HLC at Newcastle in collaboration with Newcastle City Council and English Heritage (2012-14); data created by this project has already been provided to local authorities to inform the planning process in Sunderland, Gateshead and South Tyneside. From 2006-10, Turner was a member of on the Project Board that guided development of English Heritage's national method for Historic Seascape Characterisation (alongside Fairclough). Newcastle's Irish Sea HSC and North Sea HSC projects have subsequently contributed to further revisions of the national HSC method.

Impact case study (REF3b)

Second, the research has influenced changes in conservation policy and practice at both the national and international levels. As a result of their expertise in HLC, Turner and Fairclough were invited to join the industry working group that produced new guidance on historic landscape for the Highways Agency (Turner was the only member based solely in an HEI; Fairclough represented English Heritage, though he was also a Visiting Fellow at Newcastle). They contributed by advising on the development of a historic character-based method for assessing, minimising and mitigating the impact of development that reflects the ubiquity and time-depth of historic character, requires detailed analysis of affected areas, and considers the effects of mitigation (e.g. new planting schemes). This guidance (**IMP2**) won a Commendation in the Landscape Policy category at the Landscape Institute Awards in 2007, and became a new section in the Highways Agency's *Design Manual for Roads and Bridges (DMRB) 11, Section 3.2, HA208/07 (IMP3)*. The guidance is employed when Environmental Statements are drawn up for all planned major road schemes and modifications to existing schemes. The result is that the impact on historic landscape during road schemes has begun to be assessed and mitigated for the first time alongside other environmental impacts. Examples of Environmental Statements following the guidance include – among many – those for the A5-M1 Link (Dunstable Northern Bypass) (2009), the A21 Tonbridge to Pembury scheme (2009), the A453 widening M1 Junction 24 to A52 Nottingham scheme (2009), the M1 Junction 19 Improvement (2010), the A6 to Manchester Airport Relief Road (2010), the A8 Belfast-Larne Dual carriageway scheme (2011), the A556 Environmental Improvement (2012) and the A556 Knutsford to Bowden in Cheshire.

Two major historic seascape characterisation projects - the Irish Sea (English Sector) HSC and the North Sea HSC - have been undertaken at Newcastle in partnership with English Heritage. These projects are directly informing the work of heritage bodies, local authorities and developers responsible for managing and planning land-use across much of northern and east-coast England. For example, the HSC programme has helped to inform the definition and coverage of the 'seascape' (to include cultural as well as natural aspects) as designated in the Marine Management Organisation's preparatory Marine Plans for the east coast and seas, and the requirement for wind farm developers to assess seascape impacts in the context of Environmental Impact Assessment (AIA) Environmental Statements. Natural England's guidance 'Approach to Seascape Character Assessment' now embeds HLC and HSC in its workflow. This guidance has been adopted by the Marine Management Organisation for the preparation of future Marine Plans, which means that HSC data created by Newcastle will therefore be integrated into Marine Plans and make a direct contribution to marine planning.

The underpinning research has influenced landscape planning/management practice in other parts of Europe too, including Spain (where Turner was on the Steering Committee of the PaHisCat project, designed to develop historic characterisation data to complement the Catalan Landscape Observatory's 'Landscape Catalogues of Catalonia'); Greece (where Turner has advised the Med-INA Institute on developing new policy for the Greek Ministry of Environment); and Ireland (through the 'Making Christian Landscapes' project, see references in the Heritage Council's *Historic Landscape Characterisation in Ireland: Best Practice Guidance (IMP6)*).

Publications on research applications of HLC have stimulated discussion, and a growing awareness of the potential of HLC research for sustainable landscape management, among heritage professionals outside HEIs in the UK and abroad (**IMP7**). Newcastle work on the research value of HLC has been cited in recent papers by many practitioners, from the Heritage Council in Ireland to the Swedish National Road and Transport Research Institute (**IMP8**), and from the Catalan Landscape Observatory to the Norwegian Institute for Cultural Heritage Research (**IMP9**).

Increasing public understanding of heritage

The research has also impacted upon society by enhancing aspects of public-facing heritage presentation. Whilst HLCs and HSCs are primarily employed by heritage practitioners and planners, public accessibility is an important factor in encouraging communities to acknowledge and care for local heritage assets. In their 2011 review of online public access to HLCs (*HLCs on the Web*), English Heritage singled out the Devon HLC pages (authored by Turner in 2005-7) as an example of good practice (**IMP10**). The results of the Irish Sea (English Sector) and North Sea

Impact case study (REF3b)

HSC projects are also freely available to practitioners and the public via the Archaeology Data Service. Fairclough and Turner drew on their HLC expertise to develop new Europe-wide characterisation methods for the EC Culture programme's 'Eucaland' project (2007-10). Its aim was to help Europeans recognize their agricultural landscapes as a significant part of their cultural heritage: the project resulted in a touring European exhibition and popular publications.

5. Sources to corroborate the impact

Evidence of influence on guidelines, legislation, regulation, policy or standards:

- Direct contributions to UK guidance/policy documents (which were all in force 2008-13):
 - (IMP1) English Heritage, 2002. *Historic Landscape Characterisation. Template Project Design* <http://www.english-heritage.org.uk/publications/hlc-template-project-design/> [see p.ii]
 - (IMP2) Highways Agency, 2007. *Assessing the Effect of Road Schemes on Historic Landscape Character*. <http://www.helm.org.uk/guidance-library/assessing-the-effect-of-road-schemes-on-historic-landscape-character/> [see p.63]
 - (IMP3) Highways Agency, 2007. *Design Manual for Roads and Bridges (DMRB) 11, HA208/07* <http://www.dft.gov.uk/ha/standards/dmr/vol11/section3.htm> [based directly on IMP2]
- Examples of UK HLC projects citing HLC research undertaken by Turner:
 - (IMP4) Cranborne Chase & West Wiltshire Downs AONB, 2010. *Historic Environment Action Plans. Creating and describing Historic Character Areas*. http://www.historiclandscape.co.uk/conserving_method2.html
 - (IMP5) Shropshire Historic Landscape Character Assessment. Final Report 2007 www.shropshire.gov.uk/environment.nsf/open/3752F7151ABFD814802576C5004D50D6
- Guidance for practitioners outside the UK citing HLC research by Turner and Crow:
 - (IMP6) Lambrick, G., I. Hind and J. Wain, 2013. *Historic Landscape Characterisation in Ireland: Best Practice Guidance*. Dublin: Heritage Council. http://www.heritagecouncil.ie/fileadmin/user_upload/Publications/Landscape/HLC_Final_Web2.pdf

Testimonial for the impact of the research:

(IMP7) Contact: Head of Assessment, English Heritage, UK.

Evidence of debate among practitioners, leading to developments in attitudes or behaviours:

- Examples of papers or reports by practitioners citing HLC work by Newcastle researchers:
 - (IMP8) Antonson, H., 2009. 'Bridging the gap between research and planning practice concerning landscape in Swedish infrastructural planning', *Land Use Policy* 26:2, 169-177. DOI: 10.1016/j.landusepol.2008.02.009
 - (IMP9) Jerpåsen, G.B. & K.C. Larsen, 2011. 'Visual impact of wind farms on cultural heritage: a Norwegian case study', *Environmental Impact Assessment Review* 20, 206-215. DOI: 10.1016/j.eiar.2010.12.005
 - (IMP10) Quigley, P. 2011. *HLC on the Web*. English Heritage project 6088. Available: <http://www.heritagegateway.org.uk/gateway/file/hg/content/upload/upload/5128.pdf> (pp.12-14; 35).